

Hazardous Waste Operations and
Emergency Response
(Hazwoper)

First Responder Awareness Level Training

Mission:

This module is designed to meet the requirements of 29 CFR 1910.120(q), the Hazwoper regulation, for emergency response to a potential or actual release of hazardous substances or a discharge of oil. It meets the following mandated competencies from the Hazwoper regulation:

Understand “what hazardous substances are, and the risks associated with them” in an incident
USCG personnel would commonly respond to. *29 CFR 1910.120(q)(6)(i)(A)*

Understand the “potential outcomes associated with an emergency created when hazardous substances are present.” *29 CFR 1910.120(q)(6)(i)(B)*

Have the ability “to recognize the presence of hazardous substances in an emergency” that USCG personnel would typically respond to. *29 CFR 1910.120(q)(6)(i)(C)*

Have the “ability to identify the hazardous substances, if possible.” *29 CFR 1910.120(q)(6)(i)(D)*

Understand your role “in the employer's emergency response plan including site security and control” and know how to use the U.S. Department of Transportation's Emergency Response Guidebook. *29 CFR 1910.120(q)(6)(i)(E)*

Have the ability to “realize the need for additional resources, and to make appropriate notifications” as directed by your unit's policies. *29 CFR 1910.120(q)(6)(i)(F)*

Scope:

This course provides Coast Guard members with training up to First Responder Awareness Level by instructing on the following topics:

Contingency Plans

Hazardous Material Awareness

Laws and Regulations applying to Hazardous Materials

First Responder Levels

Risk Management

Hazard Recognition

Use of Resources

Confined Space Entry

Students will demonstrate competency of these topics through performance objectives, a functional-based elective exercise and a written examination.

Terminal Performance Objectives:

At the successful completion of this course, students will be able to:

- ◆ Given applicable course materials, identify the course purpose, scope, and applicable HAZWOPER regulations.
- ◆ Given a scenario, recognize what chemical and physical hazards are present and the risks associated.
- ◆ Given a scenario and the DOT Emergency Response Guidebook (ERG), state potential outcomes caused by the chemical and physical hazards.
- ◆ Given a scenario and the applicable contingency plan, state the responsibilities of the first responder-awareness individual.
- ◆ Given a scenario and the DOT Emergency Response Guidebook (ERG), describe the proper course of action based on the ERG recommendations.
- ◆ Given a scenario and the applicable contingency plan, state the notification process.
- ◆ Given a scenario, identify additional response resources needed.

Qualifications:

Participants: Coast Guard personnel who, in the course of their normal duties, may encounter an uncontrolled release of oil or a hazardous substance or any other situation that may have personnel hazards. They can be of any paygrade or rating. The experience level of the participants will range widely. Therefore, prior to conducting this training, the instructor should find out what the specific duties are of the participants and tailor the Functional Based Electives as appropriate.

Instructors: Personnel meeting the requirements of 29 CFR 1910.120 Appendix E and that have experience in oil spill response. The Training Director shall determine if an instructor is competent to teach First Responder-Awareness Level courses and so certify in writing. Instructors should have a combination of the following Hazwoper training: Hazardous Materials Technician, Hazardous Materials Incident Commander, Hazardous Materials First Responder Operations or General Site Worker.

Evaluation:

Participants shall participate in group problem solving, individual problem solving, case studies, hands-on exercises and a written examination (optional). Instructors will qualitatively determine whether the participants have met the terminal objectives

Deployment:

IAW COMDTINST 6230.31A, the District Staff will designate someone to be the “Training Director” as per 29 CFR 1910.120 Appendix E. The designated Training Director will coordinate the delivery of this Awareness level training for applicable field units. The course will require one classroom and one “breakout” room for group problem solving exercises.

Suggested Schedule:

Block title	Hours
Introduction to HAZWOPER	1.0
Recognition of Chemical and Physical Hazards	1.0
Response Issues	1.0
Functional Based Electives	1.0
Total:	4.0

Course Supplies and Equipment

Mandatory items are the normal classroom equipment (tables, chairs, A/V equipment, white board, etc.). Instructors should provide any props they desire to use for class activities and exercises (e.g. DOT placards and labels, ERGs). Instructors can obtain props such as placards, ERGs, and charts of placards and labels from various commercial suppliers. The following is a list of sources of supply for props related to DOT regulations: (copy attached)

Government Bookstores: <http://bookstore.gpo.gov/locations/index.html>

Commercial Vendors: <http://hazmat.dot.gov/erg2000/commsupp.pdf>

Instructors and training directors may obtain videos from a number of sources. The following will lend videos (note: Most loaner videos are copyrighted but some will permit copying for educational use, check before copying.):

FEMA Regional Offices: <http://www.fema.gov/about/regoff.htm>

American Chemistry Today (Chemtrec): 301-617-7824

The following vendors sell videos related to hazmat response (note: Many of the vendors that sell ERGs also sell training videos.):

Chlorine Institute: <http://www.cl2.com/>

Emergency Film Group: <http://www.efilmgroup.com/>

Video Learning LearnCom: <http://www.learncom.com> (shaving cream video)

Course References

The references listed below apply to the entire course (all except NFPA 472 are available from government websites). Instructors should procure copies of each and become familiar with them prior to teaching the course, as well as become familiar with those applicable to different unit types.

Required References

COMDTINST 6260.31A, *Health and Safety Training Requirements for Coast Guard Response Operations*
COMDTINST M16000.11 (series), *Marine Safety Manual*
29 CFR 1910.120(q), *Hazardous Waste Operations and Emergency Response*
29 CFR 1910.120 Appendix E
OSHA CPL 2-2.59A, *Inspection Procedures for the Hazardous Waste Operations and Emergency Response Standard, 29 CFR 1910.120 and 1926.65, Paragraph (q): Emergency Response to Hazardous Substance Releases*
OSHA 3172, *Training Marine Oil Spill Response Workers Under OSHA's Hazardous Waste Operations and Emergency Response Standard*
National Fire Protection Association 472
40 CFR 300, *National Oil and Hazardous Substances Pollution Contingency Plan*
49 CFR 171-180, *Hazardous Materials Regulations and Procedures*

Desired References

The following are other references that instructors may find useful:

Commonsense Approach To Hazardous Materials, 2nd Ed., Frank L. Fire
Chemistry Of Hazardous Materials, 2nd Ed., Eugene Meyer
Hazardous Materials Managing the Incident, 2nd Ed., Greg Noll, Mike Hildebrand, Jim Yvorra
Decontamination For Hazardous Materials Emergencies, Timothy V. Henry
Hazardous Materials: Strategy and Tactic, David M. Lesak
Hazardous Materials Emergencies Involving Intermodal Containers: Guidelines And Procedures, Noll, Hildebrand, and Donahue
Hazardous Materials/Waste Handling For the Emergency Responder, Kenneth York & Gerald Grey
Emergency Management of Hazardous Materials Incidents, John E. Bowen, NFPA, 1995, ISBN 0-87765-404-2

Units of Instruction

Introduction to HAZWOPER

Objectives

Terminal Performance Objectives

Identify the course goal and need for HAZWOPER Training within the Coast Guard, as well as the various types of Contingency Plans and the information found in them.

Enabling Objectives

State course purpose/goal and understand administrative procedures.

Define the applicability of the HAZWOPER standard to Coast Guard personnel

State the need for training in hazard recognition for First Responders.

State the various types of Contingency Plans and the information that can be derived from them.

Teaching Methods

Administrative Announcements	Lecture
Course Overview and Objectives	Lecture
Need for HAZWOPER Training	Lecture
Contingency Plans	Activity

References

COMDTINST 6260.31A

29 CFR 1910.120(q)

29 CFR 1910.120(q) Appendix E

OSHA CPL 2-2.59A

National Fire Protection Association 472

40 CFR 300, *National Oil and Hazardous Substances Pollution Contingency Plan*

OSHA 3172, *Training Marine Oil Spill Response Workers Under OSHA's*

Hazardous Waste Operations and Emergency Response Standard

Recognition of Chemical and Physical Hazards

Objectives

Terminal Performance Objective

Given a scenario, students shall identify their response level, the proper notification process as per the Contingency plan, and all of the chemical and physical hazards present.

Enabling Objectives

Define the terms “Chemical Hazards” and “Physical Hazards”, list examples and risks of each.

Describe the role of the First Responder Awareness level as stated in applicable OSHA regulations and describe a major limitation of this level.

Describe the use of the DOT Emergency Response Guide.

Describe the process for notifying the proper authorities of an uncontrolled discharge of oil or release of a hazardous substance.

Teaching Methods

Recognition of risks and hazards	Lecture
Basic First Responder actions and limitations	Lecture
Use of available reference material	Lecture

References

DOT Emergency Response Guidebook
National Fire Protection Association 472
40 CFR 300, National Oil and Hazardous Substances Pollution Contingency Plan
49 CFR 171-180 & 195

Response Issues

Objectives

Terminal Performance Objective

Given a scenario and the DOT Emergency Response Guidebook (ERG), describe potential outcomes caused by the chemical and physical hazards. Be able to identify confined spaces and the hazards they pose.

Enabling Objectives

Define the term “confined space” as per applicable OSHA regulations.

State the hazards that may be present in a confined space.

Demonstrate the use of the DOT Emergency Response Guidebook.

Teaching Methods

DOT Emergency Response Guidebook	Lecture and Practical Application
Confined Spaces	Lecture
Fishing Vessels and H ₂ S	Lecture

References

DOT Emergency Response Guidebook
CHRIS Manual, USCG
Fire Protection Guide on Hazardous Materials, NFPA
NIOSH Pocket Guide to Chemical Hazards, CDC

Functional Based Electives

Objectives

Terminal Performance Objective

Given a scenario and the applicable contingency plan:

List the responsibilities of the first responder-awareness individual.

Describe the proper course of action based on ERG recommendations.

Describe the notification process to alert others.

State additional response resources the incident may require.

Enabling Objectives

None.

Teaching Methods

Introduction

Lecture

Scenario

Directed Reading

Discussion

Facilitated Discussion

Application

Facilitated Discussion